Poland /Chemical Technology. Chemical Products and Their Application I-17

Industrial synthesis of dyestuffs

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32148

I → IV dye; yellow powder that dyes CF yellow. From I and 15 g 2-naphthol are obtained 35 g Co-complex of the I → 2-naphthol dye; violet powder that dyes CF a Bordeaux color.

Card 9/9

TRZCINA, Tadeusz, mgr.,inz.

Sources of losses of the luminous flux in cap lamps. Przegl gorn 17 no.9:Biuletyn 27-30 S '61.

POLAND/Human and Animal Morphology - Histochemistry. S

Abs Jour : Ref Zhur Biol., No 5, 1959, 21590

Author : Trzcincka-Dabrowska Zofia
Inst :
Title : Histochemical Investigation of Glycogen in the Normal and Pathologically Altered Cornea

Orig Pub : Klin. oczna, 1957, No 4, Dodatek, 378-393

Abstract : When glycogen (G) is demonstrated in the rabbit cornea according to the MacManus and Bauer method it is found only in the epithelial cells in the form of small granules. G is found in the greatest quantities in the cells of the basal layer in the area of Bowman's membrane. In experimental material (with mechanical trauma, burn, ulceration) and biopsies (human cornea after keratoplasty and enucleation) it was shown that G can be demonstrated in considerable quantities only in the presence of overt signs of

Card 1/2

TRZCINSKA, Krystyna

Some modern views concerning the plastication of polychlor vinyl. Tworzywa wielkoczast 6 no.7/8:207-211 Jl-Ag '61.

1. Instytut Tworzyw Sztucznych.

POLAND / General Problems of Pathology. Tumors. Comparative Oncology. Tumors in Humans. U-7

Abs Jour: Ref Zhur-Biol., No 15, 1958, 70993.

Author : Trzcinska-Dabrowska Zofia.
Inst : Not given.
Title : Glioma of the Optical Nerve.

Orig Pub: Klin. oczna 1956, 26, No 3, 207-211.

Abstract: No Abstract.

Card 1/1

TRZCINSKA-DABROWSKA, Zofia

Auto-, homo- and hetero- corneal transplantation. Experimental studies. Klin. oczna 34 no. 3:303-314 '64.

1. Z Kliniki Okulistycznej SDL w AM w Warszawie (Kierownik: prof. dr med. W.Arkin).

TRZCINSKA-DABROWSKA, Z. (Warszawa 22 ul. Gornickego 3 m 2.)

Neurinoma orbitae genus Verocay. Klin. oczna 28 no.3:347-350 1958.

1. Z Zakladu Okulistyki IDiSKL w Warszawie Kierownik: prof. dr med. W. Arkin.
(ORBIT, neoplasms
neurofibroma, case report (Pol))
(NEUROFIBROMA, case reports
orbit (Pol))

[illegible] growing mono crystals [illegible] [illegible]. [illegible]
[illegible] alloys. [illegible]
illus. 15

[illegible] 15 [illegible]. [illegible] [illegible] [illegible]. [illegible]
The first [illegible] [illegible]). [illegible]

SO: [illegible], [illegible] 7, No. 11

ARKIN, Wiktor; TRZCINSKA-DABROWSKA, Zofia

Toxic effect of streptomycin on ocular vessels. Klin.oczna 31 no.4: 343-348 '61.

1 Z Zakladu Okulistyki SDL przy AM w Warszawie Kierownik: prof. dr med. W. Arkin.

(STREPTOMYCIN toxicol) (EYE blood supply)

TRZCINSKI, A.

"Covering Models with Japanese Paper", (To be contd.) p. 749, (SKRZYDLATA POLSKA, Vol. 10, No. 47, Nov. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

TRZCINSKI, A.

"Covering Models with Japanese Paper", p. 764, (SKRZYDLATA POLSKA, Vol. 10, No. 48, Nov. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

TRZCINSKI, A.

"From the Notebook of an Instructor of Airplane Modeling", (To be contd.) p. 765, (SKRZYDLATA POLSKA, Vol. 10, No. 48, Nov. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

TRZCINCKI, A.

Measurement ofthe power of motors, (To be contd.) p. 10. (SKRZYDLATA POLSKA, Warszawa, Vol. 11, no. 2, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol.4, No.6, Jun. 1955, Uncl.

TRZCINSKI, A.

Measurement of the power of motors. (Conclusion) p. 11. (SKRZYDLATA POLSKA, Vol. 11, no. 3, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jun. 1955, Uncl.

TRZCINSKI, A.

Rubber tow rope for models of the master class. (To be contd.) p.10. (SKRZYDLATA POLSKA, Warszawa, Vol. 11, No. 9, Feb. 1955)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

TRZCINSKI, A.

Rubber towrope for models of the master class. p.10. (SKRZYDLATA POLSKA, Warszawa, Vol. 11, No. 10, Mar. 1955)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

TRZCINSKI, A.

TRZCINSKI, A. Model T 52 of the champion class (Wakefield) with a rubber drive. p. 10. Vol. 11, no. 44, Oct. 1955. SKRZYDLATA POLSKA. Warsaw, Poland.

SOURCE: East European Accessions List (EEAL) LC VOL. 5, No. 6, June 1956

T[illegible]KI, G.

"Working Out the Technological Process of Production", (Conclusion), p. 98, (MECHANIK, Vol. 27, No. 3, Mar. 195[illegible], Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

TRZCINSKA, H.

Bootjack bur (Bidens melanocarpus Wieg.) in Poland. Wszechswiat no.1:19-20 Ja '62.

TRZCINSKI, Kazimierz

Active and controlled publicity in tuberculosis control in rural areas of the Rzeszow Region. Gruzlica 32 no.8:755-761 Ag '64.

1. Z Wojewodzkiej Przychodni Przeciwgruzliczej w Rzeszowie (Kierownik: dr. med. St. Czajka).

TRZCINSKI, Kazimierz

Conservative therapy of a case of tuberculous broncho-esophageal fistula. Gruzlica 28 no.10:815-820 O '60.

1. Wojewodzki Szpital Przeciwgruzliczy w Rzeszowie, Dyrektor: dr T. Lewicki.

(BRONCHIAL FISTULA etiol)
(ESOPHAGEAL FISTULA etiol)
(TUBERCULOSIS PULMONARY compl)

TRZCINSKI, S.

TRZCINSKI, S. The problem of technological progress in repair management of the Victoria Electric-Power Plant. p. 116

Vol. 10, no. 3, May/June 1956
ENERGETYKA
POLITICAL SCIENCE
Warszawa, Poland

So: East European accession Vol. 5, No. 3, March 1957

TRZCINSKI, W.

"Uprawa tytoni ciezkich i cygarowych. Warszawa, Panstwowe Wydawn.Rolnicze i Lesne, 1952. 147 p. (Raising heavy and cigar leaf tobaccos)."

DA Not in DLC

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

TRZCINSKI, Wladyslaw

Experiences in breeding makhorka varieties. Rocz nauk roln 87 no.2:399-408 '63.

1. Centralne Laboratorium Przemyslu Tytoniowego, Warszawa.

TRZCINSKI, Wladyslaw

The cultivative and industrial value of four lines of the crossing Virginia Joyner X Perustica in the light of investigations and experiments. Rocz nauk roln rosl 82 no.4:1025-1039 '61.

1. Centralne Laboratorium Przemyslu Tytoniowego, Warszawa.

TRZCINSKI, W.

The proper economy of manure. p. 18. (PLON. Vol. 4, no. 11, Nov. 1953)

SO: Monthly List of East European Accessions, L.C., Vol. 3, No. 4, April, 1954

TRZCIONKA, Ryszard, mgr inz.

Iron metallurgy during the 20-year period of People's Poland. Wiad hut 15 no. 7/8:197-203 Jl-Ag '64.

L 9752-66 EWP(t)/EWP(c)/EWP(v)/EWP(k)/EWP(h)/EWP(b)/EWP(l)/EWA(h)/ETC(m) JD/WW

ACC NR: AP5026205 SOURCE CODE: PO/0043/65/000/07-/0200/0203

32
B

AUTHOR: Trzcionka, R. (Engineer, Undersecretary, Director)

ORG. Iron and Steel Making Union (Zjednoczenie Hutnictwa Zelaza i Stali); Ministry of Heavy Industry (Ministerstwo Przemyslu Ciezkiego)

TITLE: Twenty years of the development of the iron and steel industry in People's Poland

SOURCE: Wiadomosci hutnictwa, no. 7-8, 1965, 200-203

TOPIC TAGS: steel industry 18, metal industry 14, industrial production, economic development

ABSTRACT: This article was written on the occasion of the 20th anniversary of the iron and steel industry in the Polish People's Republic. After a brief review of the predominantly foreign-owned iron and steel industry in pre World War 2 Poland, the article summarizes the post World War 2 achievements in this industry. The limited investments and development in pre-war Poland are briefly enumerated and compared with the post-war intensive growth. A table shows the rise in the capacity of the largest blast furnaces, open-hearth furnaces, and blooming and rolling mills in operation in the years 1938-1965. The losses in percentage suffered by the iron and steel industry in Poland during the last war are given. The number of steelmaking plants put into operation in the years 1945-1965 are given (including 10 blast furnaces, 39 open-hearth furnaces, 14 electric furnaces for the production of alloy steel, 31 rolling mills, and 19 banks of coke-ovens). Some of the largest steel manufacturing plants built since 1945 are described and some of their production figures are given. Modernization

Card 1/2

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L 9752-66

ACC NR: AP5026205

of the old pre-war plants is described and their present production is given. The technical and economic indexes of the various steelworks are given. The increase in the numbers of steelworkers and engineers since 1945 is given as well as the increase in educational establishments. It is pointed out that compared with 1938 Poland now produces 6.1 times more coke, 6.4 times more pig iron, 6.0 times more steel, and 5.3 times more rolled product. The rapid increase in high-quality steel production is pointed out and relevant figures are given. New technological processes introduced since World War 2 in the steel and iron industry are detailed. Achievements in export of steel products are also presented; it is pointed out that in machinery and foundry equipment Poland now exports four times more than in 1955. Some of the new products introduced after World War 2 are enumerated.

SUB CODE: 05, 11 / SUBM DATE: None

Card 2/2

TRZCIONKA, Ryszard, mgr inz.

Role and tasks of foremen in the realization of the tasks of iron and steel metallurgy. Wiad hut 21 no.2:33-37 F '65.

1. Undersecretary of State of the Ministry of Heavy Industry; General Manager of the Association of Iron and Steel Metallurgy, Warsaw.

TRZEBA, E.

Influence of the length of the coupling element in mechanical filters. Przegl elektroniki 2 no.5/6:387-390 '61.

1. Technische Hochschule Dresden.

TRZEBIATOWSKA-JEZOWSKA, B.; KALECINSKI, J.

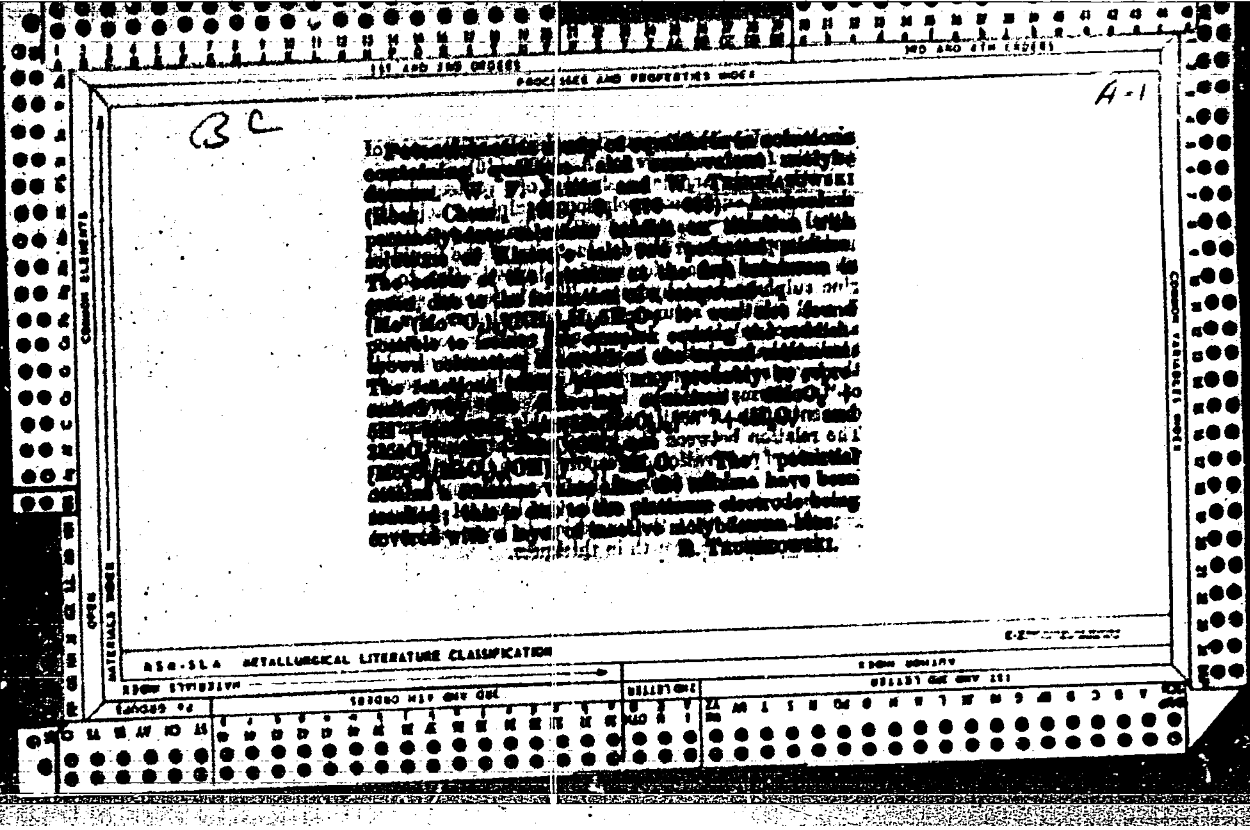
Radiation chemistry in alkaline solutions. Nukleonika 9 no.7/8: 625-635 '64

1. Institute of Structural Research, Polish Academy of Sciences, Wroclaw.

TRZEBIATOWSKI, Wlodzimierz; SKUDLARSKI, Krzysztof

Thermal dissociation of barium carbonate. Rocz chemii 36 no.9:1279-1292 '62.

1. Department of Inorganic Chemistry, Institute of Technology, Wroclaw, and Department of Structural Research, Institute of Physical Chemistry, Polish Academy of Sciences, Wroclaw.



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

BC

A-1

10 [illegible] W. [illegible] and W. Trzebiatowski [illegible] (Rocz. Chem. [illegible]) [illegible] The [illegible] [illegible] (Mo[illegible]) [illegible] The [illegible] [illegible] potential [illegible] have been [illegible] platinum electrode being covered with a layer of [illegible] molybdenum blue. [illegible] B. T[illegible]

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

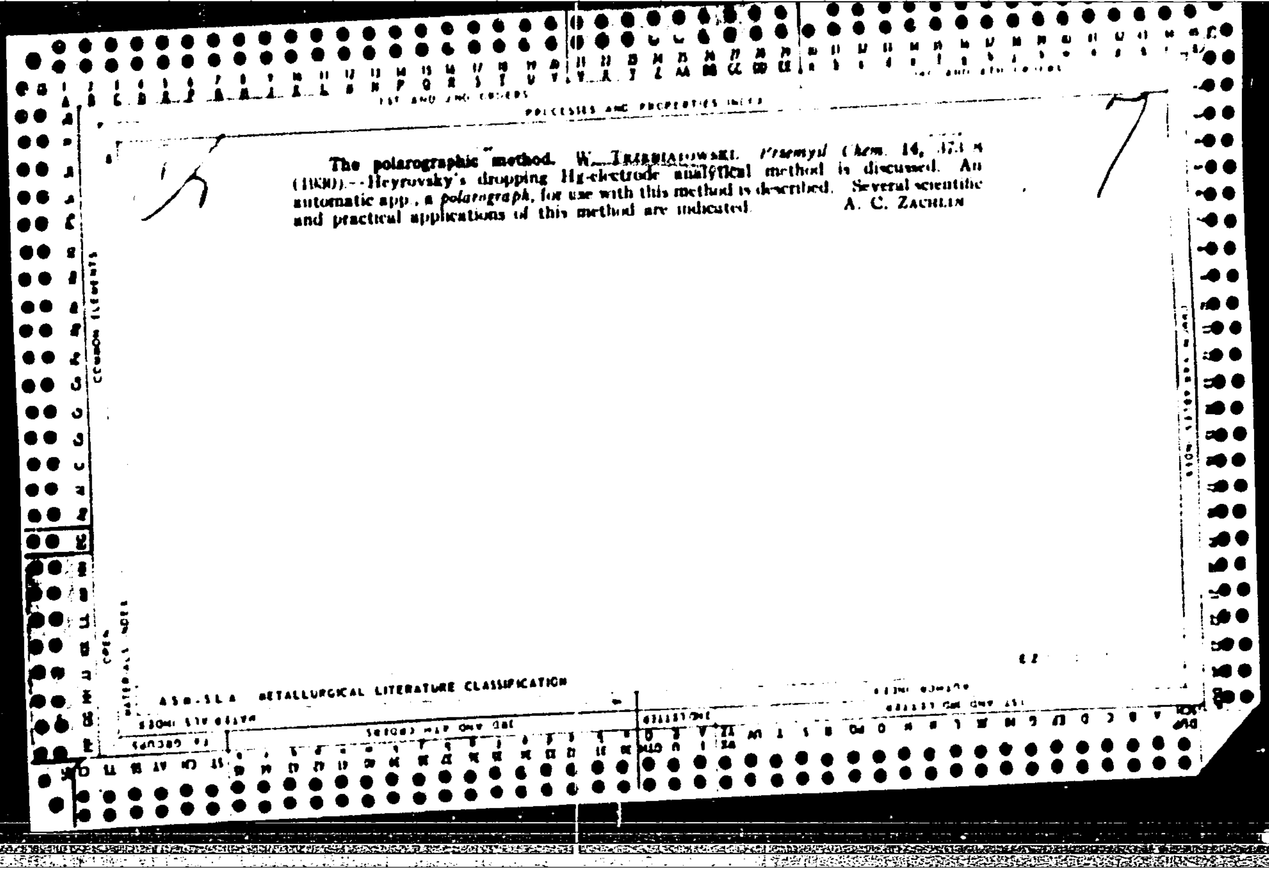
PROCESSES AND PROPERTIES INDEX

Ca

17

Potentiometric determination and separation of chromium, vanadium and molybdenum and their applications in the analysis of steel. Włodzimierz Trzebiatowski. *Roczniki Chem.* **10**, 411-35(1930)(German). SnCl$_2$ soln. was found to be an excellent and sufficiently strong reducing agent for the potentiometric detn. and sepn. of Cr, V and Mo. In the investigation of the reduction of the anions of chromic, vanadic and molybdic acids, sharp potential differences are obtained which correspond to the reduction Cr$_{VI}$ $\longrightarrow$ Cr$_{III}$, V$_V$ $\longrightarrow$ V$_{IV}$ and Mo$_{VI}$ $\longrightarrow$ Mo$_V$. When both Cr and Mo are present, 2 consecutive potential differences are obtained: Cr$_{VI}$ $\longrightarrow$ Cr$_{III}$ and Mo$_{VI}$ $\longrightarrow$ Mo$_V$. The sepn. of V and Mo is made possible by obtaining 2 potential differences, the first corresponding to the reduction V$_V$ $\longrightarrow$ V$_{IV}$, the second to the reduction V$_{IV}$ $\longrightarrow$ V$_{III}$ and Mo$_{VI}$ $\longrightarrow$ Mo$_V$. It was found that in the absence of Mo, on account of a slow reduction of V$_{IV}$ to V$_{III}$, the second potential difference did not set in. Mo exerts a catalytic action, the mechanism of which is explained. Based on this fact a new method for sepn. of Cr and V in the presence of a known quantity of Mo is described. The sepn. of all 3 elements is effected by titration of the soln. till both potential differences are passed: Cr$_{VI}$ $\longrightarrow$ Cr$_{III}$ + V$_V$ $\longrightarrow$ V$_{IV}$, and V$_{IV}$ $\longrightarrow$ V$_{III}$ + Mo$_{VI}$ $\longrightarrow$ Mo$_V$. The reduced soln. is then oxidized with KBrO$_3$ and the vanadate formed is titrated with SnCl$_2$ soln. In this way a third potential difference is obtained which is necessary for detn.: V$_V$ $\longrightarrow$ V$_{IV}$. The corresponding method for decompn. of steel was modified in such a way that the Cr, V and Mo can be detd. potentiometrically. The method described is very accurate and suitable for the detn. and sepn. of the 3 elements in technical analysis. J. Kucera

A.S.M. SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

7

The polarographic method. W. TRZEBIATOWSKI. *Przemysl Chem.* 14, 473-8 (1930).—Heyrovsky's dropping Hg-electrode analytical method is discussed. An automatic app., a *polarograph*, for use with this method is described. Several scientific and practical applications of this method are indicated. A. C. ZACHLIN

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

BC

a-1

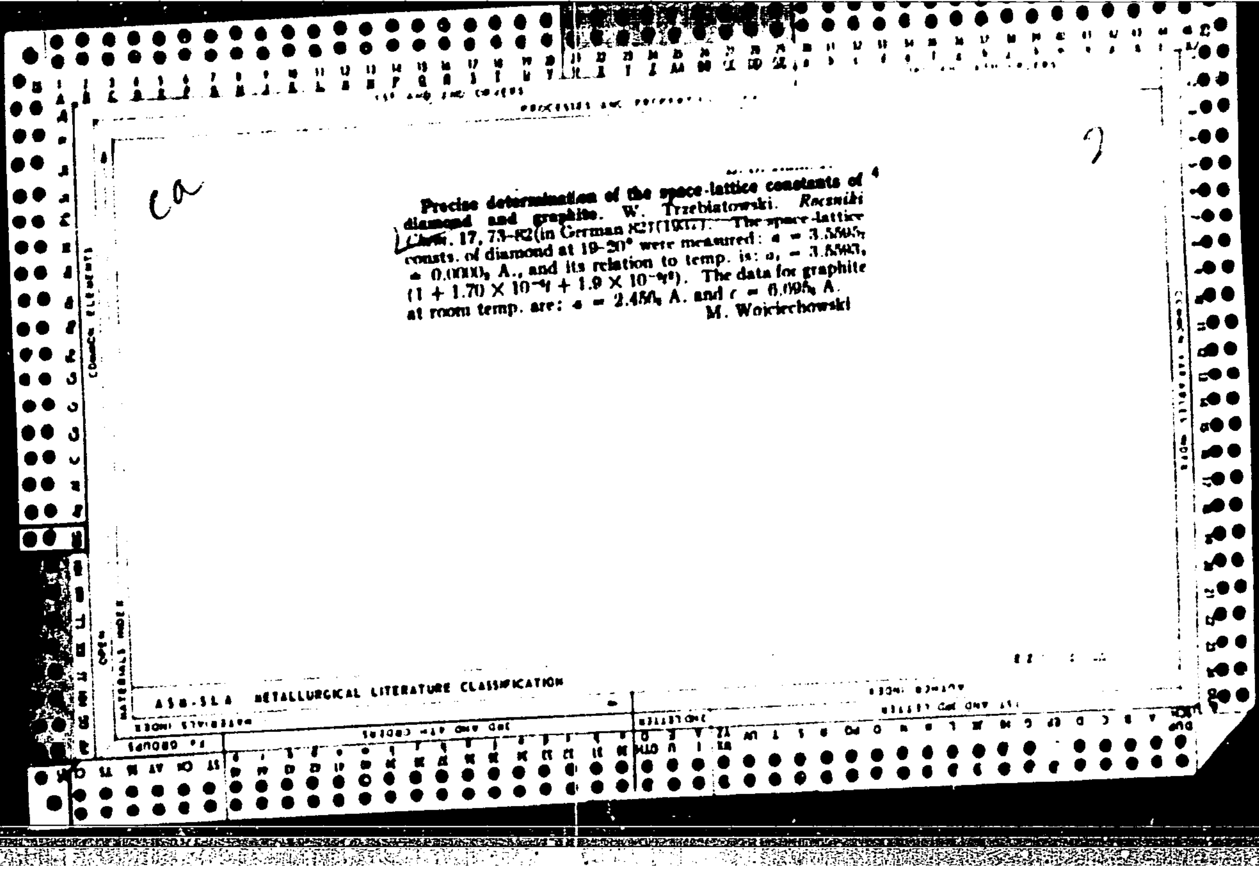
COMMON ELEMENTS

Anode polarisation of metallic electrodes. I. Polycrystalline and liquid electrodes. W. Trzebiatowski and M. Barnowski (Rocz. Chem., 1936, 16, 187—198).—The polarisation of Cu anodes (0°, 25°, and 50°) in aq. $CuSO_4$-H_2SO_4 varies with the crystal structure of the metal. R. T.

OPEN

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



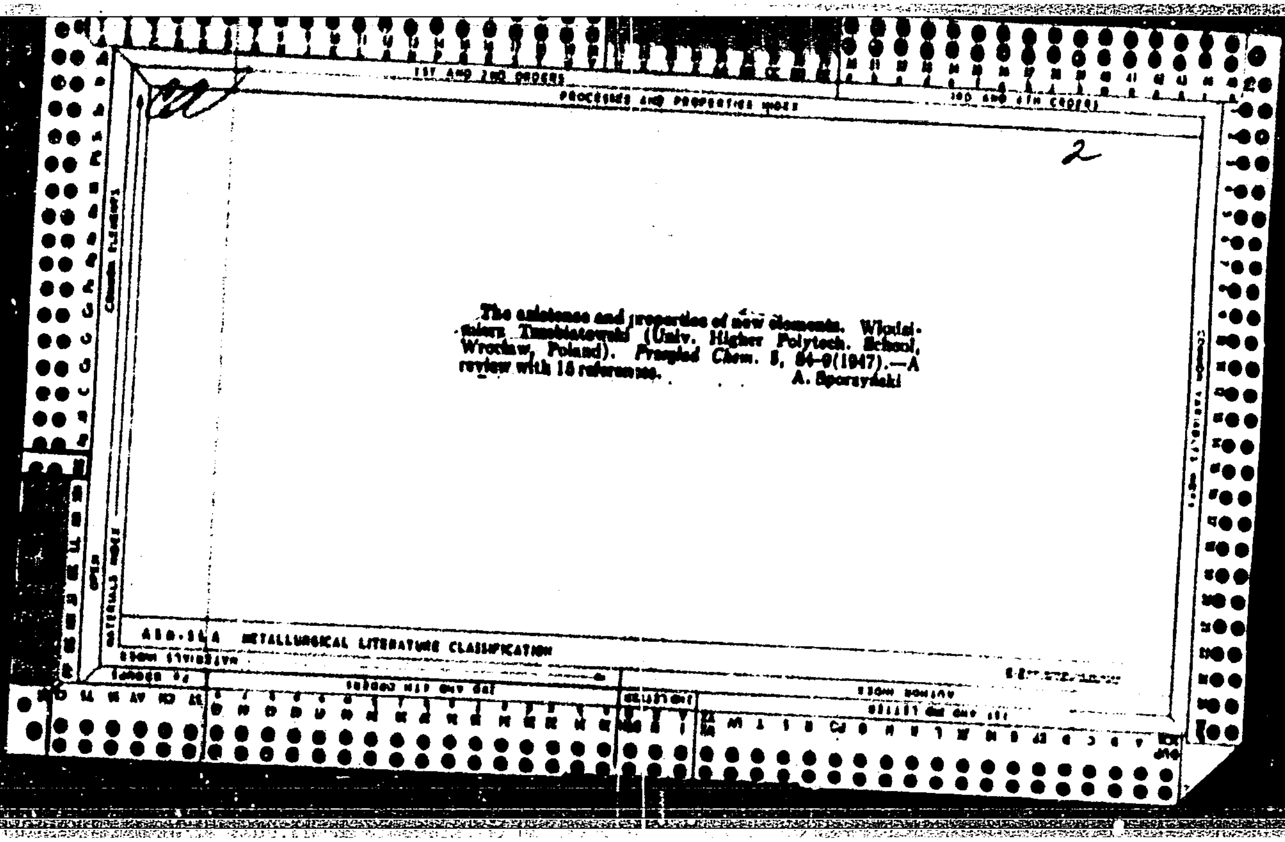
ca

9

Precise determination of the space-lattice constants of diamond and graphite. W. Trzebiatowski. *Roczniki Chem.* 17, 73-82(in German 82)(1937). The space-lattice consts. of diamond at 19-20° were measured: $a = 3.559_5 \pm 0.000_1$ A., and its relation to temp. is: $a_t = 3.559_3 (1 + 1.70 \times 10^{-6}t + 1.9 \times 10^{-9}t^2)$. The data for graphite at room temp. are: $a = 2.456_4$ A. and $c = 6.695_6$ A.

M. Wojciechowski

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS

2

The existence and properties of new elements. Włodzimierz Trzebiatowski (Univ. Higher Polytech. School, Wrocław, Poland). Przegląd Chem. 5, 84-9(1947).—A review with 15 references.
A. Sporzyński

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

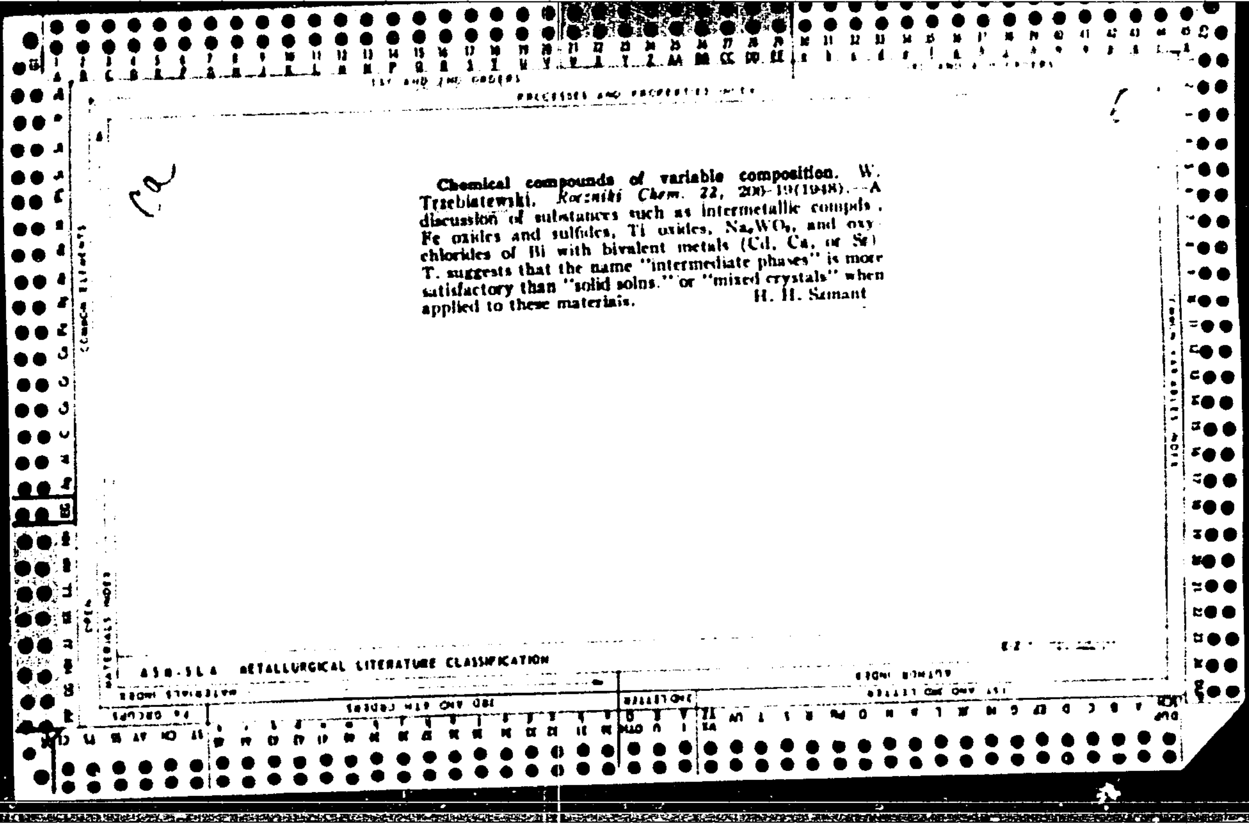
PROCESSES AND PROPERTIES INDEX

CR

2

X-ray analysis of chromium-molybdenum and chromium-tungsten alloys. W. Trzebiatowski, H. Ploszek, and J. Lobzowski (Univ., Wrocław, Poland). *Anal. Chem.* 19, 93-6(1947); cf. *C.A.* 37, 6003[4].—X-ray analysis of the Cr-Mo alloys shows that there is only one phase present at all temps. The lattice consts. of their cubic structure vary regularly with the at. compn. of the alloys. The m.p. curve of the Cr-Mo system was detd. and shown to have a min. of [illegible]° at about [illegible] at. % Mo. X-ray analysis of the Cr-W system shows an unlimited solid soln. above 1700° and two limited solid solns. below this temp. The results agree with theory. K. R. Hesse

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION



ca

Chemical compounds of variable composition. W. Trzebiatewski. *Roczniki Chem.* 22, 200-19(1948).—A discussion of substances such as intermetallic compds., Fe oxides and sulfides, Ti oxides, Na$_x$WO$_3$, and oxychlorides of Bi with bivalent metals (Cd, Ca, or Sr). T. suggests that the name "intermediate phases" is more satisfactory than "solid solns." or "mixed crystals" when applied to these materials. H. H. Samant

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

C.T.A.

Math. & Natural Sciences

[illegible]

Trzebiatowski W. **An Outline of Structural Analysis by Means of Radiography** [illegible]

Zarys rentgenograficznej analizy strukturalnej. Katowice, [illegible] PWT, [illegible] 261, 134 [illegible]

[illegible] properties of X-rays. Structure of crystals. Principles of [illegible] interference. The Laue method. Monochromatic methods. General [illegible] of structural analysis. Examples of structures of crystals [illegible]

7

The Development of Powder Metallurgy. W. Trzebiatowski. (*Hutnik* (Warsaw), 1951, 18, July-Aug., 273-278). [In Polish]. A short survey of the present state and latest developments in powder metallurgy is given. The production of titanium, titanium alloys, molybdenum, ceramic alloys, and abrasive materials is discussed. - V. G.

TRZEBIATOWSKI, W.; TROC, R.

Magnetic properties of uranium phosphides. Bul chim PAN 11 no.12:661-664 '63.

1. Department of Structural Research, Wroclaw, Institute of Physical Chemistry, Polish Academy of Sciences and Department of Inorganic Chemistry, Technical University, Wroclaw. Presented by W. Trzebiatowski.

[illegible]

CA

General & Physical Chemistry -2

Magnetic properties of metallic uranium and uranium hydride. W. Trzebiatowski, A. Śliwa and B. Staliński (Inst. Technol., Wrocław, Poland). *Roczniki Chem.* 36, 110-12(1962)(English summary).—The magnetic susceptibilities of pure metallic U and UH_3 were detd. in the temp. range 80-293°K. and 80-402°K., resp. Metallic U has paramagnetic properties practically independent of temp. UH_3 has strong paramagnetic properties with a high pos. temp. increment; below 173°K. it has ferromagnetic properties.

L. J. Piotrowski

5(2) PHASE I BOOK EXPLOITATION POL/2616

Trzebiatowski, Włodzimierz

Chemia nieorganiczna (Inorganic Chemistry) Warszawa, Państwowe wyd-wo naukowe, 1959. 779 p. Errata slip inserted. 10,200 copies printed.

No additional contributors mentioned.

PURPOSE: This book is intended for students of inorganic chemistry.

COVERAGE: This is the second edition of a comprehensive text on inorganic chemistry, "Chemia Nieorganiczna". The organization of this edition is the same as in the first. Some of the sections have been revised and enlarged, e.g. osmosis, carbon and boron compounds, the chemistry of transuranium elements, and nuclear chemistry. Some of the numerical values of certain physical constants have been corrected. The second edition was prepared in cooperation with J. Damm, MS, Assistant Professor at the Department of Inorganic Chemistry of the Wrocław Polytechnic Institute. There are 33 references: 15 English, 11 Soviet, 3 German, 2 Dutch, and 2 French.

Card 1/33

Sofanda Publishing House 1957 176 pp. 12zł 60 gr. Reviewed in Hutnik

TRZEBIATOWSKI, W. and STALINSKI, B.

"Magnetic Properties of Titanium Hydrates," Byull. Polskoy Akad. nauk. Otd. III, 1, No 3-4, 1953, pp 127-131

Systematic measurements of susceptibility of the system Ti-H and deuterides Ti-D were carried out at a temperature range from 80 to 300°K, sometimes up to 470°K. With increasing H concentration in the Ti lattice, paramagnetism was found to rise. Properties of hydrates do not substantially differ from those of deuterides.

RZhFiz, No 3, 1955

[illegible]

'Magnetic Susceptibilities of Niobium Hydrides'
Buyll. Pol'skoy Akad. Nauk, Otd. III, Vol 1, No 7, 1953, 317-31[illegible]

Measured the magnetic susceptibility and lattice parameters of Nb hydrides to composition NbH 0.86. Metallic Nb dissolves H to the composition NbH$_{0.18}$ accompanied by a lattice parameter change of 3.303 to 3.318 A. The heterogeneous filed a-B extends from NbH$_{0.10}$ to NbH$_{0.57}$. As the H content increases, the susceptibility decreases and the temperature coefficient changes in such a manner that at NbH$_{0.09}$ the susceptibility becomes independent of the temperature. Despite the differences in electron strauture of Nb and Pd, the susceptibility isotherms of the Nb hydrides are similar to the isotherms for the system Pd-H. Authors assume that the dissolved hydrogen is ionized and believe that the decrease in paramagnetism of Nb hydrides is due to the vigorous interaction of the electrons in the d-shell of the Nb atom, which is in accord with Zener's theory (Zener C., Phys. Rev., 1951, Vol 81, 440) . RZhKhim, No 3, 1955)

SO: Sum No 845, 7 Mar 56

TRZEBIATOWSKI, W.

5

POL.

541.12.017 : 546.56 : 546.821 : 546.82

3146

Trzebiatowski W., Berak J., Romotowski T. The Copper-Titanium System. „Układ miedź-tytan". Roczniki Chemii (PAN), No. 4, 1953, pp. 423—437, 13 figs., 1 tab.

Microscopic, thermal and X-ray investigations of copper-titanium alloys in the range up to 75 at-% Ti show, that there exist five intermetallic compounds, Cu_3Ti, Cu_2Ti, Cu_3Ti_2, CuTi and $CuTi_2$. Cu_3Ti, CuTi and $CuTi_2$, are congruent crystallising compounds with relative melting points 905°, 932° and 1014°C. Cu_2Ti and Cu_3Ti_2 are formed by peritectic reactions at 892° and 935°C. Cu_2Ti decomposes at 872°C. into Cu_3Ti + CuTi; Cu_3Ti_2 at 855°C. into CuTi + Cu_3Ti. These compounds were found to exist only on a restricted scale. The solubility of titanium in copper is 6.5 at-% Ti at 870°C., 3.4 at-% Ti at 800°C., and 1.3 at-% Ti at 350°C. The coordinates of the eutectic points are 24 at-% Ti and 895° (α-Cu + Cu_3Ti); 29 at-% Ti and 860° (Cu_3Ti + Cu_2Ti); 57 at-% Ti and 960 (CuTi + $CuTi_2$); 70 at-% Ti and 1009° ($CuTi_2$ + β-Ti).

②

ZE

5

POL.

3147 541.12.017 : 546.824-21 : 546.45-31 : 543.82

Trzebiatowski W., Dryś M., Baran W. The Beryllium Oxide-Titanium Dioxide System.

„Układ tlenek berylu-dwutlenek tytanu". Roczniki Chemii (PAN), No. 4, 1953, pp. 438-441, 4 figs., 1 tab.

The BeO-TiO_2 system was examined thermically, microscopically and radiologically in the range between 0 and 60 mol.% BeO. Beryllium oxide and titanium dioxide form an eutectic mixture at 1675° and 70 mol.% TiO_2 composed in practice of pure components. Microscopic and X-ray investigations did not confirm the existence of chemical compounds.

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[illegible] in Cu [illegible] The samples were first homogenized at 870° for 72 hrs., quenched in water, and then annealed at 600° for 160 hrs. and at 300° for 235 hrs. Chem. analysis was done by soln. in aqua regia and evapn. with concd. H_2SO_4. Cu was detd. electrolytically, and Ti as TiO_2. Microstructure was etched with 5% soln. of ammonium persulfate [illegible]

Cu [illegible] and [illegible]

POL. [illegible]

✓ The beryllium oxide titanium dioxide system. [illegible]
[illegible]
[illegible]

TRZEBIATOWSKI, WLODZIMIERZ.

Chemia nieorganiczna. (Wyd. 1.) Warszawa, Panstwowe Wydawn. Naukowe. (Inorganic chemistry. 1st ed. diagrs., graphs, index, tables)

Vol. 2, 1954. 742 p. SCIENCE

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS (EEAL), LC, Vol. 5, no. 2 Feb. 1956

TRZEBIATOWSKI W.

2

POL.

620.18

3256

Trzebiatowski W. The Structure of Metals.

„Struktura metali". Warszawa, 1954, PWT, 16⁰, 176 pp., 102 figs., 15 tabs.

The fundamentals of metals and alloys from the point of modern theory on the structure of solids. The book is divided into two parts. Part 1, dealing with the electronic structure of metals, contains general characteristics of the metallic state, a review of the classical electronic theory of metals, the modern electronic theory of metals and a description of the theory of metallic bond. Part 2, dealing with the network structure of metals, contains sections reviewing metallic elements, solid solutions of metals, phases and intermetallic compounds. The work also contains a comprehensive review of literature dealing with the subject. 194 bibliographic references.

8I

TRZEBIATOWSKI, W.

H

1 Pm f.

PO

3169 540.701.11 : 450.701.11.02 : 538.221

Trzebiatowski W., Śliwa A., Staliński B. Magnetic Properties of Uranium Hydride and Deuteride.

„Własności magnetyczne wodorku i deuterku uranu". Roczniki Chemii (PAN). No. 1, 1954, pp 13-20, 6 figs., 2 tabs.

Uranium hydride and deuteride were prepared from pure components, by means of a vacuum apparatus. The magnetic properties of UH_3 and UD_3 were examined within the temperature range of 80°K to ~ 410°K. The magnetic moments of the compounds were calculated from the values obtained for the coefficient of magnetic susceptibility. These values conform to the Curie-Weiss law at temperature above 183°K. They are equal in practice and amount to $\mu = 2.44 \pm 0.01 \mu_B$. Uranium hydride below 174°K and uranium deuteride below 172°K present a sudden increase of magnetic susceptibility and typical saturation effects for ferromagnetic substances. The saturation moment of UH_3 determined at 80°K is approximately $0.65 \mu_B$.

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TRZEBIATOWSKI, W.

POL.

546.431-31 : 546.824-31 : 541.12.017 . 546.82

3153

Trzebiatowski W., Dryś M., Berak J. The Barium Oxide-Titanium Dioxide System.

„Układ tlenek baru — dwutlenek tytanu". Roczniki Chemii (PAN). No. 1, 1954, pp. 21—28, 6 figs.

The BaO-TiO$_2$ system was investigated by microscopic, thermal and X-ray analysis in the range of 33 to 100 mol% TiO$_2$. Four compounds, namely 2BaO.TiO$_2$, BaO.TiO$_2$, BaO.2TiO$_2$ and BaO.4TiO$_2$ were identified with relative melting points at 1920°, 1610°, 1315° and 1465°. These compounds form among themselves eutectic mixtures at the following compositions and temperatures: 41 mol.% TiO$_2$ at 1565°, 65 mol.% TiO$_2$ at 1310°, 68 mol.% TiO$_2$ at 1305° and 82 mol.% TiO$_2$ at 1155°. It was found that the high temperature transformation of metatitanate BaTiO$_3$ is characterised by a transition of the perovskite type lattice to the hexagonal modification.

POL.

Crystal structure of TiAs. K. Łukaszewicz and W. Trzebiatowski (Inst. Technol., Wrocław). *Bull. acad. polon. sci.* Classe III, 2, 277-9(1954)(in English).—The hexagonal unit cell with $a = 3.63_4$ and $c = 12.04_6$ kX contains 4 mols. TiAs. The space group is *C6/mmc* with a z parameter of the Ti atom of 0.116. The structure represents a slightly distorted type of a closed-packed layer structure with 2 different positions of the As atoms and alternating layers of Ti and As atoms. The calcd. at. distances are Ti-6As (I) = 2.691 kX and Ti-6As (II) = 2.647 kX, resp. F. Schossberger

PH

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TRZEBIATOWSKI, W., BIERAK, I.

"System Platinum-Rhenium,"
Byul. Polskoy akad. nauk. otd. 3, 2, No 3, pp 35-38, 1954

X-ray analysis and metallographic studies of the system Pt-Re were carried out. The samples were processed by the powder method and by smelting in an arc furnace filled with argon. Results of analysis of 13 sintered and 16 smeltered specimens showed that the diagram of the system Pt-Re is characterized by 2 broad bands of solid state separated by a narrow two-phase band. (RZhFiz, No 4, 1955)

SO: Sum, No 606, 5 Aug 55

TRZEBIATOWSKI, W.; BEREK, J.; NIEMIEC, J.

High-temperature laboratory furnaces. p. 458. (PRZEMYSL CHEMICZNY, Vol. 10, No. 9, Sept. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

TRZEBIATOWSKI, WLODZIMIERZ

8

Magnetic properties of uranium hydride and deuteride. Włodzimierz Trzebiatowski, Alfred Śliwa, and Bohdan Stalinski (Inst. Technol., Wrocław, Poland). *Roczniki Chem.* 28, 12-20(1954)(English summary).—Previous research on UH_3 and UD_3 was done on decompn. elasticity by Gibb, *et al.* (*C.A.* **47**, 3675*i*) and on their unusual lattice by Rundle (*C.A.* **41**, 6102*d*; **45**, 9362*h*). Now the not yet well known magnetic properties of UH_3 and UD_3 are investigated, with partial results already published (cf. *C.A.* 46, 10726*c*). Magnetic moments of UH_3 and UD_3 were detd. from susceptibility coeffs. within the temp. range 190°K.-400°K. according to the Curie-Weiss law with $\mu = 2.44 \pm 0.04\ \mu_B$, using specially designed app. It was found that UH_3 below 174°K. and UD_3 below 172°K. exhibit ferromagnetic properties. Sylvia Nowinska

②

TRZEBIATOWSKI, W.

5

④

Barium oxide-titanium oxide system. W. Trzebiatowski, M. Drys, and J. Kerak (*Rocsn. Chem.*, 1954, **28**, 21—28).—Study of the BaO-TiO_2 system in the range 33—100 mol.-% TiO_2 by method of thermal, microscopical, and X-ray analysis reveals existence of four compounds 2BaO,TiO_2, BaO,TiO_2, BaO,2TiO_2, and BaO,4TiO_2, melting at 1820°, 1610°, 1315°, and 1465° respectively. There are four eutectic mixtures of the following composition and m.p.: 44 mol.-% TiO_2—1585°, 65% TiO_2—1310°, 68% TiO_2—1305°, and 82% TiO_2—1455°. The results of this work differ in many respects from the results of Stratton (*J. chem. Phys.*, 1951, **19**, 33) obtained by a micro-method.

S. K. LACHOWICZ.

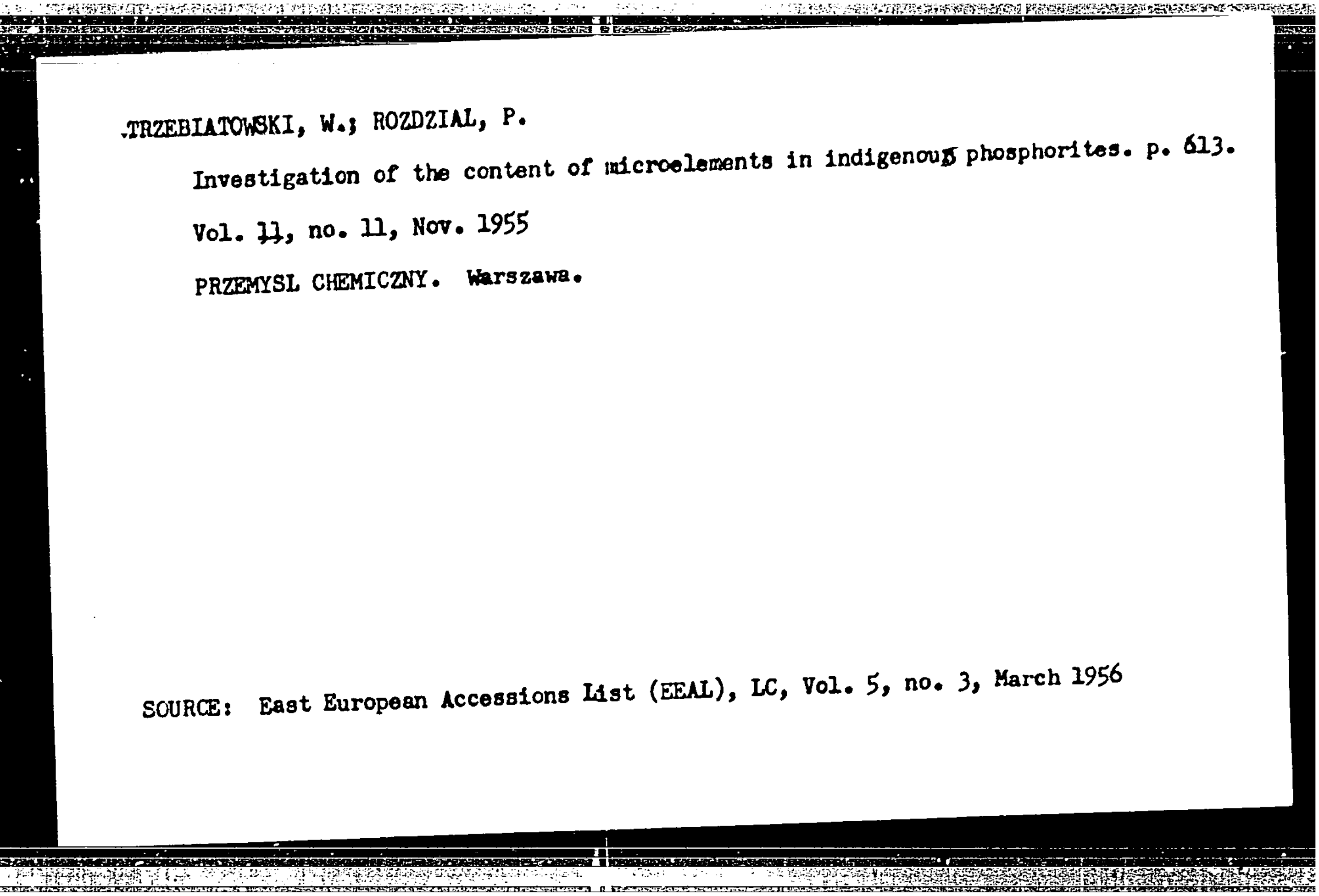
10-14-54

TRZEBIATOWSKI, W.

TRZEBIATOWSKI, W. Development of studies of inorganic chemistry in Breslau. p. [illegible].

Vol. 1, No. 4, 1955
KOSMOS.
Poland
SCIENCE

So: East European Accessions, Vol. 5, May 1956



TRZEBIATOWSKI, W.; ROZDZIAL, P.

Investigation of the content of microelements in indigenous phosphorites. p. 613.

Vol. 11, no. 11, Nov. 1955

PRZEMYSL CHEMICZNY. Warszawa.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956

TRZEBIATOWSKI, WLODZIMIERZ 1

01

The structure of $Re_{24}Ti_5$. Wlodzimierz Trzebiatowski and Jan Niemic (Inst. Technol., ~~Wrocław, Poland~~). Roczniki Chem. 29, 277-83(1955)(English summary).—The $Re_{24}Ti_5$, of practically invariable compn. and stable in the range 600-1700°, is cubic, body-centered, and belongs to the structure type A 12, isotypic with α-Mn. The lattice const. $a = 9.59$kX. Detailed analysis of x-ray intensities gave a probable ordered distribution of atoms with the positions: 24Re—D_1, 2Ti—X, 24Re—D_1, 8Ti—A.

P. Dreyfuss

(1) M4T

TRZEBIATOWSKI, W.

Unit cells of barium titanates, $BaO.2TiO_2$ and $BaO.4TiO_2$. K. Łukaszewicz and W. Trzebiatowski (Inst. Technol., Wrocław, Poland). *~~Roczniki Chem. 29,~~* 913-4(1955)(English summary).—Unit-cell data for barium titanates $BaO.2TiO_2$ (I) and $BaO.4TiO_2$ (II) were detd. by x-ray studies of crystals. I is monoclinic with 3 mols. in the unit cell of the following dimensions: $a = 9.32$ A., $b = 3.90$, $c = 8.38$, $\beta = 102°$. II is orthorhombic with 2 mols. in the cell of the following dimensions: $a = 14.53$ A., $b = 6.3$, $c = 3.79$. Systematic absences were ($h0l$) when ($h + l$) was odd. This is characteristic of two space groups D_{2h}^{13}-*Pmmn* and C_{2v}^{7}-*Pmn*.

P. Dreyfuss

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(1)

pm

~~Trz~~
TRZEBIATOWSKI, WLODZI

CH

The system strontium oxide-titanium dioxide. Włodzimierz Trzebiatowski and Mirosława Dryś (Inst. Technol., Wrocław, Poland). *Roczniki Chem.* 29, 964-5(1955)(English summary).—Preliminary results of the investigation of the SrO-TiO_2 phase diagram are given. At 1440 ± 10° $SrTiO_3$ forms a eutectic mixt. with TiO_2 (I) between 70 and 80 mole % I. $3Sr.2TiO_2$ (II) and $2SrO.TiO_2$ (III) were also detected, but II decompd. on melting. At 1740 ± 20° a eutectic mixt. of III and SrO was observed between 20 and 30 mole % I. ①

P. Dreyfuss

TRZEBIATOWSKI, W.

Poland/Analytical Chemistry - Analysis of Inorganic Substances G-2

Abs Jour : Referat Zhur - Khimiya, No 3, 1957, 8543

Author : Rozdzial, P. and Trzebiatowski, W.
Inst : Not given
Title : On the Trace Content of Certain Elements in Calcium Cyanamide and on the Methods of Its Determination

Orig Pub : Roczn. Chem., 1956, Vol 30, No 1, 321-322 (in Polish with a summary in English)

Abstract : The results from the spectroscopic determination of a number of elements present in trace amounts in calcium cyanamide produced at the Khorzhov Nitrogenous Fertilizer Plant are given. Among the elements which have been determined are Mn(0.006%), Pb (0.006-0.008%), Ni (0.006%) and Cr (0.003%). The presence of Cr, V, and Co in amounts exceeding 10^{-3}% could not be established. In addition, a determination of the first four elements in Jena glass P/O glass has been made. It has been found that special methods must be used in the determination of small amounts of these elements, the methods being of a type which precludes the introduction [sic] of the elements to be determined from the glass.

publ. Prom., Lab. Structural Research, Inst. Phys. Chem, Polish A.S.

TRZEBIATOWSKI, W.

POLAND/Physical Chemistry. Thermodynamics. Thermochemistry. Equilibria. Physical-Chemical Analysis. Phase Transitions. B

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 73236.

Author : Wlodzimierz Trzebiatowski, Josef Damm, Tadeusz Romotowski.

Inst : German Ceramic Society.

Title : Study of Reaction of Anhydrite with Quartz. I. Thermodynamic Computation. II. Reaction Course in System $CaSO_4 - SiO_2$.

Orig Pub: Roszn. chem., 1956, 30, No 2, 431-441.

Abstract: I. The free energy changes depending on temperature are computed for 19 reactions possible in the system $CaSO_4 = SiO_2$. The polymorphous $\alpha - \beta$ conversions of SiO_2, $CaSiO_3$ and $CaSO_4$ are taken into considera-

Card : 1/4 publ. from Lab. Structural Research, Inst of Physical Chemistry, Polish Acad Sci, Warsaw

B

POLAND/Physical Chemistry. Thermodynamics. Thermochemistry. Equilibria. Physical-Chemical Analysis. Phase Tr Transitions.

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 73236.

nents was determined by the method described earlier (Andreasen A.H.M., Ber. Dtsch, Keram. Ges., 1930, 11, 249). That reaction, which depends on the temperature and the duration of heating, proceeds in 3 stages. The first stage is characterized by an excess of quartz over calcium sulfate. At that occasion, first a metasilicate is formed, the amount of which reaches the limit of about 21 mol. % independently of the reaction temperature. The next stage starts after the border amount of $CaSiO_3$ has been reached and consists in the initial formation of the orthosilicate. Both these stages proceed at temperatures up to 1200°. The third stage is distinguished by the formation of the liquid

Card : 3/4

TRZEBIATOWSKI, W.K.

PHASE I BOOK EXPLOITATION SOV/3921

Akademiya nauk SSSR. Institut fizicheskoy khimii

Problemy kinetiki i kataliza. [t] 10: Fizika i fiziko-khimiya kataliza (Problems of Kinetics and Catalysis. [vol.] 10: Physics and Physico-Chemistry of Catalysis) Moscow, Izd-vo AN SSSR, 1960. 461 p. Errata slip inserted. 2,600 copies printed.

Eds.: S.Z. Roginskiy, Corresponding Member of the Academy of Sciences USSR, and O.V. Krylov, Candidate of Chemistry; Ed. of Publishing House: A.L. Bankvitser; Tech. Ed.: G.A. Astaf'yeva.

PURPOSE: This collection of articles is addressed to physicists and chemists and to the community of scientists in general interested in recent research on the physics and physical chemistry of catalysis.

COVERAGE: The articles in this collection were read at the conference on the Physics and Physical Chemistry of Catalysis organized by the Otdel khimicheskikh nauk AN SSSR (Section of Chemical Sciences, Academy of Sciences USSR) and by the Academic Council on the problem of "the scientific bases for the selection of catalysts." The Conference was held at the Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry of the AS USSR) in Moscow, March 20-23,1958. Of the great volume of material presented at the conference, only papers not published elsewhere were included in this collection.

Frolov, V.M., O.V. Krylov, and S.Z. Roginskiy. [Institute of Physical Chemistry of the AS USSR]. Catalytic Properties of Germanium 102

Kuchayev, V.L., and G.K. Boreskov [Fiziko-khimicheskiy institut imeni L.Ya Karpova (Physicochemical Institute imeni L.Ya Karpov)]. Investigation of the Relation Between the Catalytic Activity and the Semiconductor Properties Of Germanium 108

Lyashenko, V.I., G.P. Romanova, and I.I. Stenko [Institute of Physics of the AS UkrSSR]. Change in the Surface Contact Potential of Germanium During Adsorption and Catalysis 111

Krylov, O.V., S.Z. Roginskiy, and Ye. A.Fokina [Institute of Physical Chemistry of the AS USSR]. Catalysis Over Semiconductors in the Selfconductance Zone 117

Kalechits, I.V. [Eastern Siberian Branch of the AS USSR]. Selection of High Temperature Sulfide Catalysts for Various Cases of Destructive Hydrogenation 121

II. CATALYSIS OVER METALS

Boreskov, G.K. [Physicochemical Institute imeni L.Ya.Karpov]. Catalysis Over Metals 128

Bonch-Bruyevich, V.L., and V.B. Glasko [Department of Physics of Moscow State University]. Contribution to the Theory of Chemical Adsorption of Metals 141

Trzebiatowski, W.K. [Institute of Physical Chemistry of the Polish Academy of Sciences, Wroclaw]. Structure and Magnetic Properties of Some Metallic Contacts 155

Tret'yakov, I.I. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Adsorption of Gases on Metals with the Aid of an Electron Projector 164

Gorokhovatskiy, Ya. B. [Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo AN UkSSR Institute of Physical Chemistry imeni L.V. Pisarzhevskiy of the AS UkrSSR)]. On the Problem of the Relation of Catalysis and Chemisorption to the Electron State of Metal Surface 169

Krasil'shchikov, A.I., and L.G. Antonova. Investigation by Electrochemical Methods of the Gas Reactions of Catalytic Hydrogenation 172

Sokol'skiy, D.V. [Academy of Sciences,Kazakhskaya SSR]. On the Problem of Principles in the Selection of Catalysts for Liquid Phase Hydrogenation 175

Freydlin, L.Kh. [Institut of Organic Chemistry of the AS USSR].Investigation of the Selective Action of Catalysts in Hydrogenation and Reduction Reactions 187

Gorbunov, A.I., and G.K. Boreskov [Moscow Chemical Technological Institute imeni D.I. Mendeleyev]. Catalysis of Isotopic Exchange in Molecular Hydrogen by Transition Metals of the 4th Period 192

Lachinov, S.S., L.D. Kuznetsov, V.A. Karkovskiy, V.N. Shishkova, L.M. Dmitriyenko, and B.G. Lyudkovskaya [State Institute of the Nitrogen Industry]. Activity and Structure of Iron Catalysts With Three and Four Promoters for the Synthesis of Ammonia 199

Lebedev, V.P. [Moscow State University]. Relation Between the Parameters of the Arrhenius Equation for Coated Platinum Catalysts 204

Roginskiy, S.Z., Yu.Ya.Sinyak, and M.I. Yanovskiy [Institute of Physical Chemistry AS USSR]. Investigation by the Isotope Method of the Surface of the Alkali Promoter of an Ammonia Catalyst 210

TRZEBIATOWSKI, WLODZIMIERZ

POLAND/Physical Chemistry - Crystals. B-5

Abs Jour : Ref Zhur Khimiya, No 5, 1958, 13578

Author : Wlodzimierz Trzebiatowski, Bohdan Stalinski.
Inst : -
Title : X-Ray Study of Zirconium - Hydrogen System.

Orig Pub : Roczn. chem., 1956, 30, No 3, 691-696

Abstract : Zr hydrides were produced at 400° of spectrally pure Zr and H_2 obtained by thermal decomposition of Ti hydride. 19 preparations of composition from $ZrH_{0.10}$ to $ZrH_{1.99}$ were made and they were studied by the powder method, as well as in Preston chambers. The radiations Cu-$K\alpha$ and Fe-$K\alpha$ were used. The accuracy of the lattice parameter determination was above -0.05%. 3 phases (α, β, γ) were revealed in the Zr - H system. The phase is a solid solution of H_2 in hexagonal α-Zr. It appears in the 2-phase region ($\alpha + \beta$) up to the composition $ZrH_{1.32}$. The face centered cubic β-phase

Card 1/2

Chair Inorg. Chem, Wroclaw Polytech, Lab. Structural Research
Inst. Phys Chem, Polish AS

TRZEBIATOWSKI, WLODZIMIERZ

POLAND/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria, Physical-Chemical Analysis, Phase Transitions. B-8

Abs Jour : Ref Zhur - Khimiya, No 5, 1958, 13762

Author : I - Jadwiga Wojciechowska, Jozef Berak, Wlodzimierz Trzediatowski. II - Jozef Berak, Jadwiga Wojciechowska.

Inst : -

Title : Study of $CaO - P_2O_5 - SiO$ System. I. Particular System $3CaO.P_2O_5 - CaO.SiO_2 - SiO_2$. II. Particular System $3CaO.P_2O_5 - 2CaO.SiO_2 - CaO$.

Orig Pub : Roczn. chem., 1956, 30, No 3, 743-756, 757-771

Abstract : I. The systems $3CaO.P_2O_5 - SiO_2$ (I), $3CaO.P_2O_5 - CaO.SiO_2$ (II) and $3CaO.P_2O_5 - CaO.SiO_2 - SiO_2$ (III) were studied by the thermal, microscopic and roentgenographic methods. The system I is a pseudobinary one. The solubility of SiO_2 in the phosphate at the eutectic temperature (t. eut.) of 1535° is about 2.5%, i.e., a half of what Trömel and others have given (Trömel G. and others., Z. anorgan.

Card 1/4

Inst. Technol. Wroclaw

POLAND/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria, Physical-Chemical Analysis, Phase Transitions. B-8

Abs Jour : Ref Zhur - Khimiya, No 5, 1958, 13762

46% of CaO and 1380° (1350° according to Barrett) correspond to the eutectic point in the system III. The shape of the eutectic curves is similar to that observed by Barrett. The immiscibility region in the liquid phase was observed in another range than by Barrett. Bibliography 13 titles.

II. The systems $3CaO.P_2O_5$ - $2CaO.SiO_2$ (IV) and $3CaO.$ $.P_2O_5$ - $2CaO.SiO_2$ - $CaO.SiO_2$ (V) were studied by the thermal, microscopic and roentgenographic methods. The Bredig's assumption (Bredig M., Phys. Chem., 1942, 46, 747; J. Amer. Ceram. Soc., 1950, 33, 188) was confirmed for the system IV. This is a pseudobinary and peritectic system characterized by large regions of solid solutions, chiefly of -$2CaO.SiO_2$. At 1300°, a new phase -silicocarnotite - is forming in the result of a reaction, which takes place

Card 3/4

POLAND/Physical Chemistry. Kinetics. Combustion. Explosions. B
Topochemistry. Catalysis.

Abs Jour: Ref Zhur-Khim., No 15, 1958, 49606.

Author : Trzebiatowski, Wlodzimierz.
Inst :
Title : Some Remarks Concerning Polish Contributions in the Field of Chemical Kinetics.

Orig Pub: Kosmos (Polska), 1957, B 3, No 3, 181-183.

Abstract: No abstract.

Card : 1/1

POLAND/Physical Chemistry - Kinetics. Combustion. Explosions. Topochemistry. Catalysis. B-9

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24244

not dependent on H and temperature. Values of χ correspond to additive quantities calculated on the basis of χ-values for pure gamma-Al_2O_3 and massive Pt. The authors point out that within the investigated interval of α they did not detect any anomalous magnetic properties of Pt (increase of χ on decrease of α), contrary to the previously published data of Kobozev N. I. (Zh. fiz. khimii, 1952, 26, 1349).

Card 2/2

TRZEBIATOWSKI, W.

POLAND / Physical Chemistry. Thermodynamics. Thermochemistry. Physico-Chemical Analysis. Phase Transition. B

Abs Jour: Ref Zhur-Khimiya, No 11, 1958, 35384

Author : Trzebiatowski Wlodzimierz, Terpilowski Janusz
Inst : Not given
Title : Thermodynamic Characteristic of Certain Intermetallic Phases of Wide Composition Ranges.

Orig Pub: Roczn. Chem., 1957, 31, No 1, 333-335

Abstract: The characteristic of certain intermetallic phases is presented. The former is based on the composition versus partial molar value characteristic of: thermodynamic potential $\overline{\Delta G}$, entropy ΔS, enthalpy $\overline{\Delta H}$ calculated on the basis of literary data. The

Card 1/2

TRZEBIATOWSKI, W.

TRZEBIATOWSKI, W.

Remarks on some minute ingredients in calcium cyanamide and the method of their determination.

p. 359 (Roczniki Chemii) Vol. 31, no. 1, 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

TRZEBIATOWSKI, W,

SCIENCE

PERIODICALS: ROCZNIKI, CHRMII, Vol. 31, No. 2, 1957

TRZEBIATOWSKI, W. The system strontium oxide-titanium doixide. p. 489.

Monthly list of East European Accessions (EEAI) Vol. 8, No. 4, LC
April 1959, Unclass.

TRZEBIATOWSKI, W.

SCIENCE

PERIODICAL: ROCZNIKI CHEMII, Vol. 31, No. 2, 1957

TRZEBIATOWSKI, W. Structure and magnetic properties of palladium catalysts with γ-Al_2O_3 as carrier. p. 497.

Monthly List of East European Accessions (EEAI) LC Vol. 8, No 4.
April 1959, Unclass

POLAND / Physical Chemistry. Thermodynamics. Thermochemistry Equilibria. Physico-Chemical Analysis. Phase Transitions. B

Abs Jour: Ref Zhur-Khimiya, No 24, 1958, 80625.

Author : Terpilowski, J., Trzebiatowski, W.
Inst : Not given.
Title : Thermodynamic Characteristics of Intermetallic Phases of the Daltonian and Berthelotian Types.

Orig Pub: Arch. hutn., 1958, 3, No 2, 97-112.

Abstract: Previously published data (Celader A., Z. phys. Chem., 1933, A 163, 107; A 164, 428; 1934, A 168, 274; A 169, 260) pertaining to electrochemical measurements for the determination of partial molal thermodynamic constants (such as the thermodynamic potential G, enthropy S, enthalpy H) of the

Card 1/3 14

POLAND / Physical Chemistry. Thermodynamics. Thermochemistry Equilibria. Physico-Chemical Analysis. Phase Transitions. B

Abs Jour: Ref Zhur-Khimiya, No 24, 80625.

Abstract: of the Cu-Zn system; and of the Bi-Tl system and phase of the Pb-Tl system are characteristic with the Berthelotian type phases. It was established that a degree of deviation in the stochiometric compositions constitutes the basic criterion that determines the direction of behaviours of the intermetàllic phase of varying composition and causes it to act either as Daltonian or as Berthelotian phase.

Card 3/3 15

B-5

POLAND / Physical Chemistry. Crystals.

Abs Jour: Ref Zhur-Khimiya, No 2, 1959, 3669.

Author : Niemiec, J. and Trzebiatowski, W.
Inst : Polish Academy of Sciences.
Title : Solid Solutions of Rhenium Containing σ-Phases.

Orig Pub: Bull Acad Polon Sci, Ser sci chim, geol et geogr, 6, No 4, 223-226 (1958) (XVII) (in English with a Russian summary).

Abstract: The authors have made an x-ray study of a series of alloys of Re with Cr, Mo, W, and Fe. The capacity of these alloys to form ternary solid solutions is confirmed by the occurrence in these alloys of σ-phases. Continuous series of solid solutions have been observed to be formed by the following binary σ-phases: Mo_2Re_3-FeMo (1200°),

Card 1/2

TRZEBIATOWSKI, W.

POLAND/Physical Chemistry. Kinetics. Combustion. Explosives. B
Topochemistry. Catalysis.

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 73329.

Author : Wlodzimierz Trzebiatowski, Helena Kubicka.
Inst :
Title : Structure and Magnetic Susceptibility of Platinum Contacts Fixed on γ-Al_2O_3.

Orig Pub: Roczn. chem., 1958, 32, No 1, 3-15.

Abstract: The structure of Pt contacts with various metal contents fixed on γ-Al_2O_3 was studied. Their magnetic susceptibility, crystalline structure and catalytic activity with reference to C_6H_6 hydrogenation were determined.

Card : 1/1

POLAND/Electricity - Matter with Metallic Permeance 3-4

Abs Jour : Ref Zhur - Fizika, No 2, 1959, No 3686

Author : Trzebiatowski Wlodzimierz, Rozyczka Jadwiga
Inst : Institute of Technology, Wroclaw, Poland
Title : Electric Properties of Ag_2F.

Orig Pub : Roczn. chem., 1958, 32, No 2, 18[illegible]-187

Abstract : The electric conductivity of Ag_2F was measured in the temperature range from +20 to -170°C. Small crystals, obtained with the aid of anode dissolution of silver, were used. The measurements were carried out by a balanced-bridge method with dc and ac (50 and 10^3 cycles) and gave identical results. A positive temperature coefficient of resistivity was found in Ag_2F crystals, like in metals. From measurements of the Hall effect at a magnetic field of 7200 oersteds and a current of 3 amp, the Hall constant was found to be 1.9 ± 0.13 m^3/Coulomb. The sign of the thermal emf, which was determined relative to silver,

Card : 1/2

POLAND/Physical Chemistry.

Abs Jour: Ref Zhur-Khim., No 1, 1959, 203.

Author : Trzebiatowski Wlodzimierz, Lukaszewicz K.
Inst :
Title : The Crystalline Structure of Arsenides of Zirconium,
ZrAs and ZrAs .

Orig Pub: Roczn. chem., 1958, 32, No 2, 189-201.

Abstract: In the system Zr-As in the range of 30-70% of at. As, two phases were determined by X-ray: ZrAs (I) and ZrAS (II). Crystals of I were examined by the powder method and in the case of II a single-crystal examination was made. The parameters of the lattice: I hexagon., a 3.804, c 12.87 A, Z = 8, f. gr. Pb3/mmc; II rhombic, a 6.801, b 9.027, c 3.689 A, Z = 4.

Card : 1/2

[illegible], Wroclaw, Poland

ZDANOWICZ, W.; LUKASZEWICZ, K.; TRZEBIATOWSKI, W.

Crystal structure of the semiconducting system Cd_3As_2-Zn_3As_2.
Bul chim PAN 12 no. 3:169-176 '64.

1. Institute of Structural Research, Polish Academy of Sciences, Wroclaw. Presented by W.Trzebiatowski.

SUSKI, W.; TRZEBIATOWSKI, W.

Magnetic properties of uranium sulfides. [illegible] 277-279 '64.

1. Institute of Structural Research, Wroclaw, Polish Academy of Sciences, and Department of Inorganic Chemistry, Technical University, Wroclaw. Presented by W. Trzebiatowski.

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SOURCE CODE: PO/0002/65/000/002/0056/0063

ACC NR: AP6025192

AUTHOR: Trzebiatowski, Wlodzimierz (Regular member PAN)

ORG: none

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ABSTRACT: The article reports on the research projects and trends in the field of physical chemistry as they are reflected in the activities of these two institutions. Unlike in other departments, emphasis is here on fundamental research not necessarily dictated by the demands of a growing national economy. The Institute is subdivided into seven divisions: 1) physical chemistry of organic raw materials, 2) physical chemistry of surface phenomena, 3) physico-chemical principles of technology; the Department of Physico-Chemical Structure Research used to be a division of the Institute, but has become an independent unit in 1963 and is working now mainly on problems in solid state structure of rare metals, their alloys and compounds. The report is thorough, but incomplete: some divisions of the Institute are not mentioned in this particular instance. [JPRS]

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